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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

SEPTEMBER, 1939.

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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

SEPTEMBER, 1939.

Since Sunday forenoon, the 3rd instant, the United Kingdom has been at war with Germany, following on circumstances which leave no doubt that the present rulers of that country have no regard for any system that provides for the rights and freedom of the individual—being or nation. Within a period of a quarter of a century, therefore, we are again engaged in a conflict to preserve our civilization, and there is no doubt that once again we will emerge victorious. The people of this land are united in their resolve to bring about a speedy and decisive victory, and plans are already well laid for this purpose. In this war the battle line has no limits, and extends into factory and field. The question of supply is of paramount importance, and, as during the years 1914 to 1918, the agricultural industry will be engaged to its maximum capacity. Already steps have been taken to deal with the immediate situation, and a summary of these is printed in the special article on page 294. Further developments have taken place since this article was written, chief of which is the Order made by the Ministry under the terms of which it is compulsory for farmers to increase their crop areas. Full particulars of the requirements of the Order are printed on the back page of this Report.

18th September, 1939.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st SEPTEMBER, 1939.

Although the weather of the first ten days of August continued more or less unsettled, with frequent heavy showers and dull, close conditions, the remainder of the month was exceptionally fine and warm, and favourable for harvesting operations. Late cut hay was well saved, and the cutting and saving of the grain crops also proceeded rapidly under most genial conditions. Flax, too, was dealt with expeditiously, and the bulk of the crop has been handled in a satisfactory manner. On account of the pressure of these operations, and of the fact that the demand for potatoes last month continued quiet, comparatively little effort was directed towards digging operations.

Following the moist conditions earlier, the warm sunny weather was most beneficial to pastures and growing crops. Well-managed grass lands are in an excellent state and providing an abundance of good quality "keep" and, generally speaking, should no unforeseen circumstances make it otherwise, the question of hand feeding store cattle should not arise for some considerable time yet. The good weather also had a most beneficial effect on the maturing of the corn crops, whilst good growth was made by roots and potatoes. It was reported that with a plentiful supply of grass of good quality, there was little demand for feeding stuffs for live stock, except the normal requirements for pigs and poultry. Purchased feeding stuffs continued plentiful at easier rates up to the middle of August, since when the position underwent a complete change with the worsening of the international situation, and prices recorded a general advance.

Cattle and sheep continued to make good improvement in growth and condition, and the general health of the animals has been satisfactory. "Maggoting" in sheep and lambs was, however, fairly prevalent in some districts during August. Cases of "hoose" in young cattle, and abortion in dairy animals have been very few in number.

THE CROPS.

WHEAT.—The warm, sunny weather during the greater part of last month enabled good progress to be made with harvesting operations. In most districts the bulk of the crop has already been saved in excellent condition, but in some of the later areas much of it is still in stooks in the fields.

Oats.—This crop is generally in a very satisfactory condition but, as a rule, where oats followed roots or potatoes the straw is short and likely to give lighter yields than normally. Little lodging has occurred, and whilst ripening was somewhat later than usual in some localities, it was further advanced in others. Cutting has been practically finished, and the saving of the crop is in full swing; in the earlier districts it is now nearing completion. The warm, damp weather at the close of last month caused some heating of oats in the stacks, but it is thought that little damage has been done. Some early oats have already been threshed.

Small offerings of last season's white oats continued to be marketed at a few centres during August, and prices hardened in sympathy with the trend of purchased cakes and meals. The general range of prices was from 4/8d. to 6/3d., and the average was 5/6¾d. per cwt. compared with 5/4¾d. for July, 1939, and 7/9¾d. for August, 1938. Increased offerings of oat straw fetched an average price of 39/9d. per ton, or 2/- above the July figure.

Barley.—This year's barley crop is very variable. In some districts it is reported to be in an excellent condition, while in others it is reported to be thin and short and likely to give poor results. Progress with harvesting also varies considerably from district to district, and in some instances the bulk of the crop has been well harvested, while in others little cutting has yet been done. The estimates of the yields naturally vary considerably.

Flax.—The fine weather last month enabled good progress to be made with the pulling and retting operations, and much of the flax has already been dried and stacked in good condition. Modern improved methods of handling were much in evidence in some localities. The yields of green flax show some variability.

Hay.—The favourable weather conditions last month provided farmers with an opportunity to complete the harvesting of the hay crop which had been retarded by the rains in July. The greater portion of the crop has been well saved, but some still remains to be carted into the stack yards. Upland hay was usually a lighter crop than usual, but the quality of much of it is excellent. The damp conditions in July resulted in the later mown meadow hay giving heavier yields than was at first expected, but most of this hay is of only moderate quality, due to the bad weather experienced after it was cut. Seeds hay was also lighter than usual; little threshing has yet been done.

Larger quantities of hay at markets last month included increased offerings of new season's upland hay (unthreshed) which hardened in price and averaged 64/8d. per ton. The over-all average of upland hay (all classes) was, however, steady on the month at 70/2d. per ton, as was the price of meadow hay at 56/10d., the bulk of which continued to be offered at Belfast.

First supplies of this season's rye grass seeds were marketed at a few centres during August. A sample lot of Italian seed fetched 20/- per cwt., whilst fair offerings of Perennial and mixed seeds fetched between 15/- and 20/- per cwt.

MANGELS.—Mangels made good growth recently in most areas, and are now in a promising state. Some fields, however, are very weedy.

TURNIPS.—The turnip crop also made excellent growth during August, and early sown crops are now quite promising. The effects of the earlier drought are, however, still in evidence, and fields which had to be resown are expected to give light yields, and many misses have occurred in some crops.

POTATOES.—Following the damp conditions of July the dry weather of August has been very favourable for this crop, and the general position is highly satisfactory. The crop is now ripening gradually, but much of the foliage is still green, and growth is continuing in some fields. Very little damage has been caused this season by blight. Spraying was generally well carried out, and a feature of the season was that increased numbers of growers adopted the practice of killing the foliage as a preventive of blight. Most of the fields were kept well clear of weeds, and in some districts a good deal of digging has been done, but as a rule it has been limited to early varieties, and a smaller proportion of the entire crop has been raised than is usual at this time of year. The first earlies have been dug, and the work of lifting the second earlies is now in progress, but most of the main crop is still in the ground.

Supplies of potatoes marketed for local consumption were increased by the additional offerings of the main crop varieties reaching the markets in the latter half of August, as early varieties decreased in supply during the month. New season's main crop varieties sold at a general average price of 2/9½d. per cwt. in August, as compared with 3/- per cwt. a year ago. The Arran Victory averaged 2/11d. per cwt., and Kerr's Pink 3/2¼d. as against 3/1d. and 3/8d. per cwt. respectively in August, 1938. The prices of all early varieties fell sharply during last month and, on average, were 1/7½d. cheaper than in July at 3/2¼d. per cwt. This price compares with 3/3d. per cwt. in August, 1938. The variety, British Queen, averaged 3/2½d. per cwt. compared with 4/10½d. in July last and 3/2d. in August, 1938.

Other Vegetables.—Heavier supplies of home-grown vegetables were marketed during August, and prices generally declined further on the month. Pamphrey, at an average price of 1/8d. per dozen for the month, recorded a decrease of 5¾d., and cauliflowers, which were much more plentiful than in July, suffered a sharp fall in price to a general average of 1/10½d. per dozen. The monthly average price of leeks cheapened by 2d. to 5d. per bunch, and that for parsley by 5¾d. to 5½d. per bunch, whilst carrots were unchanged at 8/- per cwt. The first supplies of this season's parsnips and garden turnips marketed in Belfast during August fetched from 4d. to 8d. per bunch.

FRUIT.

Apples.—Supplies of home-grown apples increased during August, and were generally in excess of requirements. Prices depreciated as the month progressed, and the variety Grenadier, which was in largest supply, cheapened from a range of from 10/- to 12/- per 10 stone barrel at the beginning of August to a range of from 3/6d. to 5/6d. at the close. The chief dessert varieties on offer were Kemp and Beauty of Bath, and price ranges for these throughout the month were 6/- to 8/- per 10 stone barrel for the former, and 6/- to 12/- for the latter.

Plums and Damsons.—These fruits came on the market in increasing quantities during last month. Victoria plums remained fairly steady in price at from 2/6d. to 5/- per stone, whilst damsons fetched around 2/6d. per chip of from 12 to 14 lb.

Gooseberries.—The final offerings of ripe gooseberries sold at previous rates of from 1/- to 1/6d. per stone in the earlier part of last month.

Raspberries.—Small supplies of raspberries at the beginning of August firmed in price, and sales were effected at around 6/- per dozen punnets.

Tomatoes.—Irish tomatoes fluctuated slightly around previous quotations, and prices all over ranged from 4/- to 7/- per 12 lb.

LIVE STOCK.

Cattle.—The general health and condition of store cattle remained good during August, but as usual there have been a few cases of "hoose" and "red water".

Small to moderate supplies of store cattle at fairs last month were, as a rule, in slack demand, and late rates were maintained only in the case of the good forward animals. Inferior cattle were usually cheaper, and many failed to find purchasers.

The numbers of cattle being fattened on grass appear to be up to normal in all districts, and in a few areas increases are reported. The condition of these animals is generally good, and they are thriving well on the plentiful supply of good grass which is now available.

The offerings of beef cattle at fairs and marts during August were of fairly large dimensions, and prices generally ranged around lower levels than those ruling in the previous month.

Apart from isolated cases of mastitis and abortion, dairy cattle were maintained in good health and condition during last month, and calving proceeded satisfactorily. The abundance of grass and the comparative freedom from annoyance by warble flies resulted in generally increased milk yields. In some areas the yields were stated to exceed the normal dimensions for the time of year.

Supplies of dairy cattle were irregular at fairs, and the quality of the offerings was also variable. Trade showed some improvement during the month and late rates governed most transactions.

Sheep.—The rapid improvement in pastures has been reflected in the better conditions of the flocks, and the lambs made an excellent thrive during last month, and are now showing up well. In some areas, however, there has been an unusually large number of cases where the animals were attacked by the maggot fly which hindered a normal thrive. On the other hand outbreaks of other seasonal diseases such as "foot rot" and "liver fluke" have been kept well in check, and only a few cases have been reported. A good many farmers in some districts have disposed of the majority of their lambs, but in others there is a tendency to hold back in the hope of an improvement in prices.

The supplies of sheep and lambs at fairs and sales last month were generally plentiful, and while the best crossbred lambs and breeding ewes sold readily at fully late rates, other sorts were difficult to sell and cheaper in price.

Wool.—Supplies of unwashed wool at the principal markets decreased during the month, and on average prices rose by ½d. per lb. to 8½d. for long and 7d. for mountain. The general price ranges at markets were 8d. to 9d. per lb. for long, and 6½d. to 7d. for mountain, whilst at the Belfast saleyards quotations for wool were steady at the following rates:—Blackface, 7d.; Crossbred, 8½d.; Leicester, 9d.; Downs, 9½d.

Pigs.—The normal offerings of young pigs at fairs were in firm demand at higher prices during the earlier part of last month, but towards the close a note of uncertainty prevailed and prices moved irregularly. The few breeding sows on offer encountered a moderately good demand at about current prices.

Poultry.—The numbers of live poultry offered at markets during August were larger than in the previous month, and prices showed little change. The monthly average prices of chickens was 2d. cheaper than for July at 1/11¾d. each, whilst that for hens was firm at 1/7d., and that for ducks ¾d. dearer at 2/3¾d. each . The prices per lb. live weight paid by wholesale merchants

eased slightly during the month and ranged as follows:—Chickens, large 6½d. to 7d., medium 6d. to 6½d., small 5d. to 6d.; hens 4d. to 5d.; ducks 4d. to 6d., and ducklings 5d. to 6d.

Horses.—Trade for horses continued dull and relatively few sales were effected. The best young working horses sold fairly readily at late rates, but older animals were difficult to realise. The general range of prices for good young farm horses was from £25 to £45 per head, while older horses fetched from £10 to £30 according to age and quality. Foals fetched recent prices of from £10 to £16, while unbroken colts sold at from £18 to £30 per head.

DAIRY PRODUCE.

Milk.—The favourable weather and the abundance of grass resulted in good milk yields during last month, and they are now rather above normal dimensions, for the time of year. The supplies of milk to the creameries were plentiful, and the prices paid for milk delivered during August were a shade easier at a range of from 3½d. to 5½d. per gallon, the separated milk being returned to the farmer.

The rate of equalisation payment for milk produced in Northern Ireland and delivered to creameries for manufacturing purposes was determined at 0.30d. per gallon for the month of July, 1939, in accordance with the Milk and Milk Products Acts (Northern Ireland), 1934 to 1938.

It should be noted that under the regulations, creameries are required to distribute payments in accordance with the butter-fat content of the milk received from each supplier.

Butter.—Supplies of farmers' print and lump butter at markets last month recorded a slight increase, and average prices firmed by ¼d. to 1/2½d. and 1/0¾d. per lb. respectively.

Eggs.—Supplies of hen eggs marketed at representative centres were slightly larger on the month, but duck eggs were less plentiful. The prices, as fixed weekly by the Ministry of Agriculture, had a slight upward trend for both hen and duck eggs during August. A table of egg prices showing the prices ruling during the five weeks ended 2nd September, 1939, together with comparative figures for 1938, appears on page 304 of this Report.

FARMERS AND THE NATIONAL EMERGENCY.

Once again in the lifetime of many of us we are called upon to play our part in the national plan of defence to defeat German aggression, and already farmers—like other members of the community—have made a whole-hearted response. Here in Northern Ireland, which is mainly agricultural, the farmers have been quick to recognise the very important part which they will have to play in helping to provide the necessities of life. The experience of many of those engaged in food production during the years 1914-1918 will be invaluable in this connection, as will also that gained in recent years through the various Government schemes for planning the production and marketing of agricultural products, crops and livestock. With this object in view the Farmers' Union and other farming organisations have informed the Ministry of their desire to co-operate with the Government, and to place their resources and services at the disposal of the Ministry in its work. Schemes to give full effect to this are already under way, but until such schemes come into operation farmers are again asked to continue their normal marketing arrangements. In the meantime farmers should make themselves acquainted with the following directions which are of immediate importance.

The Harvest.—It is of immediate and vital importance that the work of saving this year's crops should be completed as early as possible. Already the hay crop has been gathered in, and much of the grain and flax has been satisfactorily dealt with, but there is still a fair amount of work to be done, and farmers are urged in the national interest to spare no effort to bring harvesting operations to a satisfactory conclusion.

Tillage.—Another important necessity is that farmers in Northern Ireland should put as much land as possible under the plough. During the coming season it is aimed at securing an additional area of at least 250,000 acres of ploughed land, and farmers are urged to make a start with this work now. In this connection it may be pointed out that under the Defence Regulations power is given to the Ministry of Agriculture to compel farmers to plough more land, and that such compulsory tillage orders will be coming into operation in due course. But the Ministry knows that all farmers in Northern Ireland will want to do their utmost to increase the nation's food supply without any compulsion.

It has already been announced that as an incentive to the campaign for increased plough land, farmers who plough permanent grass land before December 31st will receive a grant of £2 per acre. Up to this date a farmer will be paid a subsidy for doing what he will have to do later under compulsory

tillage orders. In his own interests, therefore, a farmer should plough as much permanent grass land as possible, that is land which has been in grass for seven years or more. This advice, applicable to all farmers, applies particularly to farmers in tillage districts whose land at present is all, or nearly all, down to grass.

Much can be done between now and the end of October in sowing land down to winter wheat. Where the land and conditions are suitable farmers can increase their wheat acreage as much as possible with every confidence. One other important fact that farmers should realise is that, no matter by how much the acreage of wheat, oats, and barley is increased, it will not reduce the subsidy rates. That being so, Northern Ireland farmers must aim at a big increase in the acreage sown with oats and barley during the coming spring, both in their own interests and those of the nation.

The Ministry once again desires to urge farmers to grow as much barley as possible this spring. It is essential to do so if we are to reduce the amount of maize that it is necessary to import in order to feed our pig population. Some farmers have a prejudice about growing barley, but that was not always the case. A little more than 100 years ago more barley was grown in Northern Ireland than all the other cereals put together. The reason why farmers are shy of growing barley, although some may not know it, is that barley does not grow well on sour soil. But farmers will continue to get their lime at half price, and every farmer who grows barley should apply lime. If he does it properly he should have no difficulty in getting a good crop of barley.

What should be done is this:—After the land is ploughed, cultivated, and ready for sowing, the lime should be applied at the rate of one ton per acre, and then the barley sown. When the grain germinates the young roots will have the lime close to them. Do not apply the lime and then plough. That is the wrong way, because if that is done the lime is buried and the young roots have to go down several inches before they get to the lime.

The Ministry's immediate advice to farmers is, therefore:—

(1) Sow as much winter wheat as possible this autumn, and get it sown before the end of October.

(2) Plough up as much as possible of your grassland that has been down for seven years or more before the end of December, and thus qualify for the £2 per acre subsidy.

(3) Arrange now for a big increase in the acreage of oats, barley, flax, and potatoes this spring.

It is unnecessary to stress the importance of flax. Every farmer knows that every acre of flax that is grown will be wanted.

Feeding Stuffs.—Arrangements are being made to ensure to farmers supplies of imported feeding stuffs, but it will be readily realised that, whilst for some time supplies of imported feeding stuffs may be adequate, it will be essential for farmers to make their farms more self-supporting than in the past. In this connection special attention is directed to the desirability, indeed the necessity, of increasing the area under barley so as to ensure adequate feeding stuffs for the pig population should adequate supplies of maize prove difficult.

Arrangements are in hand to control the supply and prices of all feeding stuffs.

Fertilisers and Seeds.—The Ministry is making arrangements to secure the necessary supplies of fertilisers and seeds, and farmers are urged not to restrict their application of phosphatic fertilisers and to make full use of the Lime Subsidy Scheme, especially where barley is grown.

Labour and Machinery.—The Ministry is also making arrangements to deal with the labour problem, and a supply of tractors will rapidly be made available to farmers in connection with the increased tillage operations. Provision has been made for supplies of motor spirit and heavy oil for agricultural machinery.

Cattle and Sheep.—The present arrangements with regard to the marketing of cattle and sheep will remain in force until the contrary is announced. Fat cattle should continue to be presented for certification at the various certification centres, and the beef subsidy will continue to be paid until other arrangements are made.

Pigs.—Farmers should in the meantime continue to deliver their pigs under the contracts and agreements recently made. Farmers who have not contracted or made agreements should continue to sell their pigs alive to the Pigs Marketing Board at the Board's depots. Adequate quantities of feeding stuffs are available for the pig population; farmers should not, therefore, curtail pig production.

Dairy Produce.—Present arrangements will continue to operate until further notice, but farmers are asked in the national interests to send all the milk they can to creameries, and to reduce as much as possible the amount of butter made on the farm.

There will be no change in the liquid milk scheme.

Eggs.—The present marketing arrangements will remain in force for the time being.

THE USE OF HOME-GROWN FOODS IN STOCK-FEEDING.

In order to conserve supplies of feeding stuffs and to reduce to a minimum dependance on imported feeding stuffs, home-grown foods should be used where possible for feeding to stock. Chat potatoes and tubers which are slightly diseased or sunburnt can be fed to pigs, but must first be cooked. Young pigs may get up to 2 lb. of cooked potatoes to 1 lb. meal mixture, and older pigs as much as 4 lb. cooked potatoes to 1 lb. meal mixture. Examples of suitable meal mixtures for feeding with potatoes are given in Leaflet No. 35. Milk is an excellent food for all classes of young, growing stock, and farmers are strongly advised to increase milk production to the maximum so as to have abundant supplies of separated milk, skim milk, or buttermilk to feed to pigs, poultry, and other stock.

Feeding Dairy Cows.—A suitable ration for dairy cows designed to contain as much home-grown food as possible, could be made up as follows:—

4 parts by weight Crushed Oats.
1 part „ „ Maize Meal.
1 „ „ „ Coarse Pollard.
1 „ „ „ Red Bran.
2 parts „ „ Decorticated Earthnut Cake, Decorticated Cotton Cake, or Soya Bean Meal,
with 3 lb. mineral mixture consisting of equal parts of ground limestone, steamed bone flour and common salt to 1 cwt. of this meal mixture.

This ration should be fed at the rate of 3 lb. per day for each gallon of milk produced, along with a moderate allowance of good hay and roots. Fresh clean water should be provided freely.

Fattening Cattle.—A ration suitable for fattening cattle is a mixture composed of:—

3 parts by weight Crushed Oats,
or
2 parts by weight Crushed Oats and
1 part „ „ Crushed Barley.
with 1 „ „ „ Maize Meal and
3 parts „ „ Red Bran.

Either of these mixtures may be fed at the rate of 3 lb. per head daily at the beginning of the fattening period, and gradually increased to from 6 to 8 lb. per head daily, according to the age and weight of the animals. In addition to the meal mixture an allowance of hay, or oat straw, and roots should be given. Where supplies of hay are limited, store cattle, fattening cattle, and idle horses should be given oat straw for fodder, and hay should be reserved for calves, milch cows, and working horses.

Breeding Sows.—The following meal mixtures are suitable for (1) in-pig sows, and (2) sows with litters :—

(1) 2½ parts by weight Crushed Oats.
4 „ „ „ Brown Pollard.
2 „ „ „ Red Bran.
} Wet with separated milk.

(2) 3 parts by weight Maize Meal
1 part „ „ Ground Oats
2 parts „ „ Red Bran
2½ „ „ „ Brown Pollard
} Wet with separated milk.

If milk is not available add 1½ parts by weight meat meal (60% Protein) to the mixtures as given above and 1 to 2 lb. of mineral mixture consisting of 3 parts ground limestone and 1 part common salt to 1 cwt. of meal mixture.

Fattening Pigs.—A suitable meal mixture for fattening pigs consists of :—

3 parts by weight Barley Meal
2 „ „ „ Maize Meal
2 „ „ „ Pollard
1 part „ „ Red Bran
} Either wet with separated milk or fed dry and separated milk given to drink.

If milk is not available add 1 part by [illegible] Protein) to the above mixture and 1 lb. mineral mixture to 1 cwt. of [illegible] al mixture.

Fattening pigs should get about 1 lb. of meal daily for each month of age, with a maximum of from 6 to 7 lbs. per head per day, towards the end of the fattening period.

Laying Pullets.—The following mixture is suitable for laying pullets where supplies of separated milk are available :—

4 parts by weight Pollard
2 „ „ „ Bran
2 „ „ „ Maize Meal
1 part „ „ Ground Oats
With ¼ pint separated milk per bird daily.

The Purchase and Storage of Meals.—It is essential that meals for livestock should be in good, fresh condition, and attention is directed to the care necessary when purchasing meals or meal mixtures to ensure that they are fresh. Frequently, serious digestive troubles and even deaths have occurred following the use of stale or badly-stored meals. The smell of a sample is often a good guide as to its freshness, and on no account should samples be purchased that have a musty smell or are infested with mites, even although they are offered at attractive prices. Care should be given to the storage of meals on the farm. The meals should be kept as dry as possible, and unless good storage facilities are available it is not a wise plan to purchase very large quantities of meals at the one time, owing to the risk of deterioration in quality when they have to be kept for a long period before use under unsuitable storage conditions. Iron bins not only aid in keeping the foodstuffs dry, but also prevent vermin from gaining access to them, and should be used for the storage of meals where available.

MARKETING SCHEMES AND ENACTMENTS.

Important notice regarding pig prices cancelling that already issued in respect of the period commencing 1st September.

Under the terms of the Bacon Industry Act (Northern Ireland), 1939, which came into force on the 1st September, the standard prices for pigs delivered under contracts or agreements were 70/- per cwt. for live pigs and 66/- per cwt. for dead pigs. These prices were subject to variations with fluctuations in feeding stuffs prices. The cost of the standard feeding stuffs ration, as ascertained for September, was 7/10d. per cwt., and the actual prices payable to producers were 66/9.6d. per cwt. dead weight for live pigs and 62/9.6d. per cwt. dead weight for dead pigs. A deduction from these prices of 8d. per pig in respect of the administrative expenses of the Pigs Marketing Board continued to be made.

The above prices have been superseded by the following, which will apply until further noti[illegible]

An Order entitled the Pigs (Provisional Prices) (Northern Irelan[illegible] Order, 1939, has been made under Regulat[illegible]n 55 of the Defence Regul[illegible] 1939. This Order provides that as and fr[illegible] 27th September, 1939, person in Northern Ireland shall sell offer [illegible]e to sell, or offer for sale, or buy or agree to buy or [illegible]ughte[illegible] a pig fr[illegible] the [illegible]

[illegible]ther than Sows and Boars

Weighing up t[illegible] cwt. 2 qrs. 2 lbs. dead weight—72/9d. per cwt.

,, from 1 cwt. 2 qrs. 3 lbs. to 2 cwt. 0 qrs. 0 lbs. dead weight—68/- per cwt.

,, over 2 cwt. 0 qrs. 0 lbs. dead weight—64/- per cwt.

Sows.

58/4d. per cwt.

Boars.

22/5d. per cwt.

Contracts and agreements made under the provisions of the Bacon Industry Act (Northern Ireland), 1939, are accordingly inoperative as from the 23rd September, 1939.

The authorised deductions at present in force will continue to be made. These deductions are as follow:—

Pigs Marketing Board Administrative Levy—8d. per pig.

Insurance deduction, to cover insurance in the event of a carcase being condemned as unfit for human consumption—4d. per pig in the case of dead pigs, and 7d. per pig in the case of live pigs.

These prices are for delivery at a market or live pig collecting depot or a railway station as arranged between the buyer and seller. If live pigs are delivered by the seller to the buyer otherwise than as aforesaid the price of each pig shall be increased by any sum actually paid by the seller for any such delivery by rail, or, where no part of such delivery is by rail, the sum of 8d. per pig.

These prices do not apply to live pigs under c.1.1.14 or over c.2.2.21, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside the weights c.1.2.0 to c.2.2.21 can be sold only to the Board.

CANCELLED

Authorised Deductions.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a levy at present amounting to 4/-.

In addition to this amount, a deduction of 4d. per pig may be made in the case of sales to curers to cover insurance, so that the producer will not suffer financial loss if the carcase is condemned as unfit for human consumption.

GRADING STATISTICS.

(1) Dead Pigs.

Table showing the percentages of pig carcases for the Roll and Ham cure within the weight and grade classes indicated during June, 1939.

Under c.1.0.21		c.1.0.21 to c.1.1.13					c.1.1.14 to c.1.2.3					
Suitable	Un-suitable	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	Totals
.90	.17	2.28	1.29	.27	.14	.02	4.90	5.78	1.98	.83	.05	18.61

Grade A.				Grade B.				Grade C.				
1	2	3	4	1	2	3	4	1	2	3	4	
8.31	20.84	2.90	.48	6.97	21.44	4.11	1.01	2.07	7.84	1.29	.28	77.54

Ungraded Carcases.

Under Grade A measurements. U.L.	Over Grade C measurements U.F.	Wholly condemned U.1.	Wholly black, injured or damaged U.2.	Overweights, boars, sows, etc. X.	Partly Black Y.	
.03	2.73	.03	.55	.50	.01	3.85
					TOTAL	100%

These figures have been calculated from the purchase and grading statements which the curers furnish to the Ministry.

The standard price, as fixed by the Pig Industry Council, was lower than in May, and the realised price per cwt., less levy and contribution charges,

was reduced by 7d. to 61/-. The average weight was 1 lb. heavier at c.1.2.20 lb., and the average price per carcase 10d. less than in May at £5 2s. 4d.

(II) Live Pigs.

The following table gives the percentage results of an analysis of the purchase and grading statements furnished by Wiltshire Bacon Curers in respect of live pigs delivered on direct contract by producers during the month of July, 1939.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable U.L. or U.F.	Total
Under c.1.0.0					.04
c.1.0.0 to c.1.0.20				.09	.80
c.1.0.21 to c.1.2.3	42.68	32.92	9.61	4.16	89.37
	Grade A.	Grade B.	Grade C.		
c.1.2.4 to c.1.2.7	1.66	2.31	.95	.13	5.05
c.1.2.8 to c.1.3.14	1.35	2.11	.94	.30	4.70
Over c.1.3.14					.04
				Total	100%

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration for the sixteen weeks' period ended 19th August, 1939, was 8/3¾d. The average price for the similar period ended 22nd July, was 8/5½d. These figures have been calculated by the Ministry from returns collected from ten representative centres in Northern Ireland.

The following is the ration upon which the feeding cost is based:—

Maize Meal	30%
Barley Meal	30%
White Pollards	20%
White Bran	10%
Meat Meal (60% Protein) ...	10%

MILK AND MILK PRODUCTS ACTS (N.I.) 1934 AND 1936.

RETAIL PRICES OF MILK DURING PERIOD 1st OCTOBER, 1939, TO 30th APRIL, 1940.

The Joint Milk Council for Northern Ireland has determined that the following prices for milk sold by retail shall apply during the period from the 1st day of October, 1939, to the 30th day of April, 1940, inclusive:

(a) In the County Boroughs of Belfast and Londonderry, the Boroughs of Bangor and Newtownards, the Urban Districts of Carrickfergus, Holywood, and Lisburn, the Rural Districts of Belfast and Castlereagh, the portion of the Hillsborough Rural District comprised in the District Electoral Division of Breda, the portions of the Larne Rural District comprised in Eden town, the District Electoral Division of Carrickfergus Rural, and the townland of Kilroot, the portions of the Lisburn Rural District comprised in the District Electoral Divisions of Dunmurry, Lambeg and Malone:

Milk of Grade A—not less than 2/2d. per gallon.
Milk of Grade B—2/- per gallon.
Milk of Grade C—1/10d. per gallon.

(b) In the Boroughs of Coleraine, Ballymena, and Larne, and the Urban Districts of Armagh, Ballymoney, Banbridge, Dungannon, Enniskillen, Lurgan, Newry, Omagh, Portadown and Strabane:

Milk of Grade A—not less than 2/- per gallon.
Milk of Grade B—not less than 1/10d. per gallon.
Milk of Grade C—not less than 1/8d. per gallon.

(c) In the Urban Districts of Ballycastle, Donaghadee, Newcastle, Portrush, Portstewart, Warrenpoint and Whitehead:

Milk of Grade A—not less than 2/- per gallon.
Milk of Grade B—not less than 1/10d. per gallon.
Milk of Grade C—not less than 1/8d. per gallon.

(d) In all other areas in Northern Ireland:

Milk of Grade A—not less than 1/10d. per gallon.
Milk of Grade B—not less than 1/8d. per gallon.
Milk of Grade C—not less than 1/6d. per gallon.

EXCEPTIONS :

(a) (i) A daily quantity of not less than two gallons of milk of Grade A or milk of Grade B in bottles or cartons or of milk of Grade C may be sold to one consumer at not more than 4d. per gallon less than the appropriate retail price.

(ii) A daily quantity of not less than two gallons of milk of Grade A or milk of Grade B in sealed churns may be sold to one consumer at not more than 6d. per gallon less than the appropriate retail price.

(iii) Milk sold by retail and collected by the purchaser from the vendor's premises may be sold at not more than 4d. per gallon less than the appropriate retail price.

provided that in no case may milk of Grade A be sold at less than 1/5d. per gallon, or milk of Grade B or Grade C at less than 1/3d. per gallon.

(b) Milk of Grade A, Grade B, or Grade C sold for the purpose of the manufacture of ice-cream to a person whose main business is the manufacture and sale of ice-cream may be sold at not less than 1/6d. per gallon for milk of Grade A, and 1/4d. per gallon for milk of Grade B or Grade C.

(c) Milk sold to public hospitals, to an education authority for the purpose of a scheme for the provision of meals for children in attendance at public elementary schools, to a nursery school recognised by the Ministry of Education, to camps for unemployed men approved by the Ministry of Labour (Northern Ireland), or to physical training classes conducted by the Ministry of Labour (Northern Ireland), may be sold at not less than 1/5d. per gallon for milk of Grade A, and not less than 1/3d. per gallon for milk of Grade B and Grade C.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

NORTHERN IRELAND EGG PRICES.

The following table shows the prices fixed by the Ministry and payable by licensed wholesale dealers, for eggs purchased from producers during the weeks specified, as compared with the prices fixed for the corresponding weeks of 1938.

	1939		1938	
	Hen eggs per lb.*	Duck eggs per doz.*	Hen eggs per lb.	Duck eggs per doz.
	s. d.	s. d.	s. d.	s. d.
August 5th	0 9	0 11	0 10	1 0
,, 12th	0 10¼	1 0	0 10½	1 0
,, 19th	0 11	1 1	0 11	1 1
,, 26th	0 10¾	1 1½	0 11½	1 1
September 2nd	0 11¾	1 2	1 0½	1 2

*Where hen eggs are delivered by the producer to the packing store of a licensed Wholesale dealer of Class A an additional ½d. per lb. is payable; in the case of duck eggs an additional ¾d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938.

The following were the standard deductions :—

Hen Eggs : Seconds and soiled eggs, ½d. per egg.

Rejects 1¼d. per egg up to and including week ended 26th August, afterwards 1½d. per egg.

Duck Eggs : Rejects, 1d. per egg for same period, afterwards 1¼d. per egg.

LONDON EGG PRICES.

Return of average prices of hen eggs at London on Monday each week, furnished by the London Egg Exchange, and published in the Weekly Dairy Produce Notes of the Imperial Economic Committee.

Hen Eggs per 120.

Description.	8/8/39	14/8/39	21/8/39	28/8/39
English, National Mark—				
(Specials)	16/6	19/–	19/6	19/–
(Standards)	15/–	17/6	18/6	18/6
(Mediums)	13/–	14/6	14/6	14/6
(Pullets)	10/–	10/6	11/–	11/–
Northern Ireland—				
(Extra Specials)	16/6	18/–	18/3	18/– 18/3
(Specials)	16/–	17/3 17/9	17/6 17/9	17/6 17/9
(Standards)	15/–	16/6 16/9	17/–	17/– 17/3
(Selected)	13/6	14/3 14/9	14/9 15/–	14/9 15/–

THE CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935 AND THE LIVESTOCK INDUSTRY ACT, 1937.

SUMMARY OF PAYMENTS.

The following is a summary made under these Acts up to and including 2nd September, 1939.

Live Weight.	No. of Animals.	Total Amount paid.
		£ s. d.
England and Wales	5,459,486	13,672,026 14 3
Scotland	1,681,626	4,480,231 5 11
Northern Ireland	562,858	1,214,144 10 10
Total (United Kingdom)	7,703,970	19,366,402 11 0
Dead Weight.		
England and Wales	163,774	412,044 18 0
Scotland	51,088	152,690 14 0
Total (Great Britain)	214,862	564,735 12 0

NUMBERS CERTIFIED FOR SUBSIDY.

The numbers of fat cattle certified for payment of subsidy in July, 1939, have been as follows:—

	July, 1939.					Corresponding totals in	
	Home-bred		Imported		Total	July, 1938	July, 1937
	Ordinary Grade	Quality Grade	Ordinary Grade	Quality Grade			
England ...	19,872	39,394	5,575	25,698	90,539	75,418	93,375
Wales ...	1,927	2,711	51	317	5,006	3,926	5,003
Scotland ...	1,715	13,250	1,117	10,300	26,382	24,662	25,352
Northern Ireland	4,863	2,319	541	479	8,202	6,671	7,148
United Kingdom	28,377	57,674	7,284	36,794	130,129	110,677	130,878

As the great majority of fat stock markets are held on the early days of the week the rate of marketing of fat cattle cannot be judged accurately from the number of animals marketed in a calendar month. For comparative purposes appropriate weights are applied by the Livestock Commission to each day of the week, and the figures for each calendar month are adjusted accordingly, so as to allow as far as possible for the fact that a large number of markets are held on Mondays, and that the number of markets held decreases day by day as the week proceeds. The adjusted figures for July, 1939, 1938, and 1937 are 127,724, 116,141 and 134,623 respectively.

AVERAGE PRICES OF CERTIFIED CATTLE.

The average prices per live cwt. of certified cattle in July, 1939, have been:

	July, 1939.						Corresponding averages in			
	Ordinary Grade		Quality Grade		Average		July, 1938		July, 1937	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
England	38	9	42	4	41	4	41	1	—	
Wales	38	10	42	0	40	11	41	4	—	
England and Wales	38	9	42	3	41	4	41	1	42	7
Scotland	40	0	44	7	44	1	43	11	48	3
Northern Ireland	37	10	39	7	38	3	38	5	40	9
United Kingdom	38	10	42	11	41	9	41	8	43	8

WHEAT ACT, 1932.

THE WHEAT COMMISSION MAKE A FINAL PAYMENT TO WHEAT GROWERS FOR 1938/39.

The Wheat Commission have despatched cheques to most of the registered growers in respect of the final payment of deficiency payments for the cereal year ended 31st July, 1939. When payments to all growers have been completed the Commission will have disbursed approximately £2,321,500 as the final payment for the cereal year 1938/39.

The final payment, together with the advance payments made during the cereal year amount to a total payment of approximately £9,286,000 for 1938/39. Averaged over all registered growers who have received deficiency payments, this sum would provide just over £114 per grower.

Approximately 36,800,000 cwts. of millable wheat have been credited to date in the books of the Commission to the 81,369 growers who have qualified for deficiency payments, and 197,647 wheat certificates relating to the sales of this wheat have been delivered to the Commission.

The deficiency payment for 1938/39 is at the rate of 5s. 0.56d. per cwt. (22s. 8½d. per quarter) in respect of all sales of wheat credited to growers for that year from wheat certificates delivered to the Commission.

Where growers have already received an advance payment of 4s. 0d. per cwt. on account of any wheat, the final payment with regard to that wheat will, of course, be the balance of 1s. 0.56d. per cwt. only.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

Grain Crops.—Every opportunity of favourable weather conditions should be taken to get the grain crops carted and stacked, as the grain will deteriorate if the sheaves are allowed to remain in stooks too long, especially during close, showery weather. If the sheaves are not in a fit condition for stacking from the stooks, they should, if possible, be hutted as the grain will be safe in well-made huts if dry when hutted. The huts can be carted for stacking later during weather which would not be suitable for doing so from stooks.

A good "bottom" of thorn bushes or whins should be provided on which to build the stacks so as to prevent the lower layers of sheaves from becoming damaged. Where, however, a stack-yard is available on the farm, it is an advantage to erect permanent stands on which to build corn stacks. For this purpose posts should be driven into the ground, or small concrete pillars erected, and strong scantlings laid on top of these and covered with bushes or straw. These stands may be about 2½ feet high, and are worth the cost of erection if for no other reason than to prevent rats and mice from reaching the stacks and damaging the grain. The corn stacks should be well thatched as soon as possible after being built so as to prevent damage by rain. The stacks should not be thatched when wet.

Potatoes.—Where pure certified crops of potatoes are grown, the seed should not be put in pits through the field, but carted either to houses or to be pitted on sites which would be easily accessible at any time, as the development and maintenance of trade in seed potatoes depends not only on supplying first-class stuff, but also on being able to fill orders promptly.

The ware tubers should also be pitted in an easily accessible position, or stored in houses, but should be kept separate from the seed.

It is advisable to separate diseased and sunburnt tubers from saleable potatoes at lifting time, or as soon as possible afterwards, so that the tubers which are only slightly diseased or sunburnt may be used for feeding purposes.

Potato Pits.—As emphasised above, potato pits should be placed in easily accessible places, such as alongside a roadway. If they are placed throughout the field it will not be possible to cart potatoes from them when the ground is wet; moreover, the soil will be poached in the neighbourhood of the pits, and there is a risk of the ground being contaminated with weed seeds from the covering used on the potatoes. Potato pits should be well thatched with straw before any earth is put on. Not only will this make the work of lifting the potatoes from the pits much more pleasant, but will also ensure that the

tubers are clean and free from soil, and enable easy identification of any diseased and sunburnt tubers which may have been overlooked at the time of digging.

Ventilation should be provided by leaving a space of about 8 or 10 inches along the top of the pit uncovered for a week or two after pitting. This space can be covered over when the pit is being finally earthed up before winter frosts are expected.

Potato Houses.—It is a good plan to store potatoes in houses where suitable houses are available. To be suitable for this purpose a house must be dry and frost proof, and there should be no possibility of rain beating in on the potatoes, or of any dampness coming up from the floor. Potatoes should not be piled too deeply in houses, as heating and rotting are liable to occur in a deep pile. The depth of the pile will depend on the condition of the tubers, but a pile of from 2 to 2½ feet deep should be suitable under average conditions. The door and windows of the house should be left open during the daytime, on fine days, to provide ventilation for the first few weeks of storage.

Lea Ground.—Lea ground intended for ploughing should be grazed as closely as possible, and all coarse clumps of grass cut off. This is a particularly valuable practice where an attack by leather-jacket grubs is feared, as the eggs giving rise to these grubs are laid on tufts of old grass in late summer.

Pasture.—Attention should now be given to the treatment and manuring of pastures. Although the top mowing of "shot" grasses in pastures is best done in June or early in July, it is advisable if this work was not done then to run a high set mower over grassland now to cut the tops of "shot" grasses and clumps of grass that have not been eaten by stock. The droppings of animals should be spread by harrowing the ground with a chain harrow.

Pastures which were not manured in recent years should be given a dressing of a phosphatic manure such as high grade basic slag, gafsa rock phosphate, or semsol at the rate of from 5 to 8 cwt. per statute acre in September or October. The ground should be well harrowed prior to applying such a dressing. If basic slag is to be used advantage should be taken of the Land Fertility Scheme to obtain the slag at the reduced rate. This can be done by purchasing from an approved supplier provided that not less than two tons are purchased.

Pastures which were treated with a phosphatic manure last autumn should now receive a dressing of burnt lime at the rate of from 20 to 25 cwt. per statute acre.

Lime can also be obtained at cheap rates under the Land Fertility Scheme provided that not less than two tons are purchased, and that purchases are made from approved suppliers. Lists givng the names of approved suppliers can be seen at any Creamery or Police Barracks.

Winter Wheat.—The ground for winter wheat should now be prepared so that the seed can be sown early enough for the young seedlings to have a good start in growth before severe weather sets in. The earlier the seed is sown the better will be the braird and the likelihood of a good crop. Varieties such as Queen Wilhelmina and Squarehead's Master have given good results in most parts of Northern Ireland. Queen Wilhelmina is suitable for rich soils of the type that usually produce good crops of wheat, while Squarehead's Master suits a wider range of soil conditions, and is recommended for growing in soils which are considered to be of poorer fertility than those usually selected for wheat growing.

If a variety other than these is under consideration for sowing, the Agricultural Instructor for the district should be consulted as to the likelihood of its being suitable for the locality and soil conditions. The usual rate of seeding is from 14 to 16 stones per statute acre.

In order to prevent attacks of smut and other seed-borne diseases the seed should be dressed, before sowing, with one of the modern dry dusts manufactured for the purpose. The manufacturers' instructions regarding the application of such preparations should be carefully adhered to.

Weeds.—Weeds compete with useful plants for space and plant foods and, if they become established, prevent other plants from making full use of sunshine and manures. It is, therefore, important that every opportunity should be taken to destroy weeds. Two classes of weeds are commonly met with:—

1. Annual weeds where each seed produces one plant which dies after one season's growth. Charlock, redshank, and chickweed are examples.
2. Perennial weeds which have a large root in the ground which sends up new shoots each year. Creeping thistle, dock, and coltsfoot are examples.

Perennial weeds can be eradicated by pulling out the root or by destroying it in some way. A suitable way of destroying these roots in ploughed ground is by the application of Sodium Chlorate, the powdered material being broadcast at the rate of from 200 to 300 lb. per acre. Such treatment would, however, be expensive on a field scale, and would only be justified in very bad cases. It should not be used except on land not growing a crop, and in which a crop will not be sown or planted for at least six weeks after application. Great care is required in the handling of Sodium Chlorate, as clothes, etc., on which the material has dried are very inflammable. The roots may also be "starved" if the green shoots sent up are continually cut.

Annual weeds may be destroyed at this time of year by encouraging the seeds in the ground to germinate when the young seedlings will be killed by winter frosts before seeds are produced. The seed can be encouraged to germinate by harrowing stubble ground until there is a tilth on top.

SEASONAL LIVESTOCK NOTES.

Sheep.—Where the breeding flock has not been selected and mated to a good ram this should be done now. A premium system for Border Leicester rams is in operation in all counties, and farmers are advised to send a few of their best ewes to be mated with these rams so that the quality of future breeding stock may be improved. Particulars of the location of premium rams can be obtained from the Secretary or Agricultural Organiser to the County Committee of Agriculture. Some County Committees also give monetary assistance to Blackface sheep breeders to purchase superior quality rams for mating with their flocks.

For the purpose of introducing fresh blood, facilities will be available for the admission into Northern Ireland of sheep from certain sales in Scotland. Particulars of these sales were given in last month's report, and appear again on page 317 of this report. When the ewes are being mated the wool should be clipped from around their tails, those with long tails receiving special attention.

After mating, the ram and ewes should be put on good grazing such as aftermath. Where a ram is expected to attend to more than ten or twelve ewes he should receive, in addition, a daily feed consisting of about 1 lb. of crushed oats.

Recognition of Service Dates.—In order to be able to calculate the date on which the ewes are due to lamb, the breast of the ram should be treated with keel or other colouring matter, so that the service date may be noted. The keel should be mixed with lard or grease to keep it soft and effective for some weeks. Oil should not be used for this purpose, because it damages the wool and also causes the keel to harden, thus rendering it ineffective.

The colour of the keel should be changed every three weeks so that it may be seen whether or not ewes are returning to service, thus giving an opportunity of changing the ram should it be found necessary to do so. For further information on the management of sheep see Leaflet No. 47.

Liver Fluke.—Precautionary measures should now be taken against attacks of liver fluke disease. In areas where the disease has been prevalent in the past, sheep should be dosed with carbon-tetrachloride as a matter of routine once a month. Details with regard to dosing sheep with carbon-tetrachloride, and of the precautions to be taken in using this material, are given in Leaflet No. 24.

Hoose in Cattle.—A cough in young cattle at this time of year should be regarded as hoose until the contrary has been proved. If this disease is allowed to develop heavy losses may result. Full details of the management of cattle affected with hoose are given in Leaflet No. 80, also hints for preventing the appearance of the malady.

Feeding Milk Cows.—Where it is necessary to maintain a constant milk supply the dairy cows will have to be given an increased meal allowance from now onwards, as the feeding value of grass diminishes rapidly at this time of year. Particulars of meal mixtures suitable for dairy cows are described in Leaflet No. 16. While it is possible to purchase balanced rations for dairy cows which have been compounded by reputable firms, and which give quite satisfactory results, nevertheless, many farmers find it more economical to mix their own rations. Farmers are advised to use rations containing a large proportion of home-grown feedingstuffs. For examples of such rations see page 297 of this report.

If the milk is inclined to become pale in colour when the cows are taken off the grass, the colour may be restored to some extent by feeding cabbages, or other fresh green food, to the cows. The feeding of green food also aids in increasing the animal's appetite, thus maintaining the milk supply, and also in keeping the cow in a healthy condition.

Pigs.—Unsaleable potatoes should be utilised, if possible, by feeding them to pigs. It should be noted, however, that sunburned potatoes, as well as sprouted potatoes, have been known to cause poisoning in pigs, and it would, therefore, be advisable not to feed large quantities of badly sunburned tubers. Potatoes for pigs should be cooked and the quantity fed should not exceed 12 lb. per pig per day. Particulars of suitable meal mixtures to feed along with potatoes are given in Leaflet No. 35. On page 298 of this report suitable rations for pigs, designed to contain a large proportion of home-grown feedingstuffs, are given.

SEASONAL GARDEN AND ORCHARD NOTES.

Cabbage.—Where cabbage seed was sown in July, the plants should now be ready for planting out in their permanent quarters, and the sooner this is done the better the chances of obtaining a satisfactory crop. It is essential that the plants should get firmly established before growth ceases for the season. Cabbage planted out now should be ready for use early next spring when there may be a shortage of fresh green food for human consumption. Every effort should be made by every farmer, cottager, and other land-holder to provide for this possible shortage by increasing the area under such crops as cabbage and getting the plants planted out now.

On the majority of holdings there is plenty of suitable ground in which to grow cabbage. For example, ground from which early potatoes have been dug is very suitable and, generally, all that such ground requires to prepare it for cabbage is surface cultivation to check the growth of weeds and to produce a tilth in the surface soil. Farmyard manure is not often necessary on such a site, nor are artificial manures except where the potato crop was not fully manured, and there is consequently a possibility of the fertility of the soil being low. In such cases a dressing of from 4 to 6 cwt. of superphosphate or of gafsa rock phosphate per statute acre should be applied. Nitrogenous manures such as sulphate of ammonia or nitro chalk should not be applied at this time of year to ground intended for cabbage, as they tend to encourage soft growth which is very readily affected by adverse weather during the winter. If manure is applied it should be worked into the surface soil with a light harrow.

The plants may be set out in rows either on the flat or on shallow drills. Where the land is likely to hold the surface water, planting on drills is preferable to planting on the flat. The rows should be from 18 to 24 inches apart, depending on the method to be employed in subsequent cultivation between the rows. If the cultivation is to be done by hand labour, 18 inches between the rows will suffice; but if horse labour is to be used, the rows should be 24 inches apart. The plants should be set from 12 to 15 inches apart in the rows, the distance depending on the variety and on the size of matured heads required.

Great care should be taken to ensure that the plants are firmly planted. A simple test to ascertain if the plants are being planted sufficiently firmly is to catch the edge of one of the outer leaves of the plant between the finger and thumb and pull. If the plant comes out of the ground it was not planted firm enough, but if the portion of the leaf which is held between the finger and thumb tears away from the rest of the leaf it may be assumed that the plant has been planted sufficiently firmly to ensure successful growth. Each plant as planted should be tested for firmness of planting until the worker obtains a knowledge of the degree of firmness required.

Lettuce.—Those who have glass-houses should arrange to make a couple of small sowings of lettuce seed now. If a suitable variety, such as Cheshunt Early Giant, Loos Tennisball, etc., is chosen, and the seed sown in a shallow box of well-prepared soil before the end of September, the plants should be ready for planting out as soon as the house has been cleared of the tomato crop. Plants grown as sturdily as possible during the winter, should be ready for use during the early spring months and thus provide a further source of valuable green food at a time when it is usually scarce. Later sowings than those mentioned above could also be made so as to keep up a succession of this most useful salad crop. Lettuce plants grown in cold frames during the winter will also be a valuable source of supply for next spring.

The most troublesome pests of winter-grown lettuce are slugs and "damping off". The latter is caused by different species of fungi. The slugs can be controlled by using the Meta and bran bait as recommended and described in Leaflet No. 89, "Some Pests and Diseases of Vegetable Crops", while the "damping off" can largely be prevented by taking suitable precautions when watering the soil. Before planting is done, the soil should be given a thorough soaking with water, and when this is done the ground should not require any further watering for several weeks. When watering, subsequently, care should be taken not to wet the foliage of the plants.

Winter Greens.—Broccoli and other winter greens should be kept as free as possible from weeds, and encouraged in every other way to develop to the fullest extent.

Apples.—Arrangements should be made well in advance for the pulling and storing of apples. It is impossible at the present time to give any indication of the demand which is likely to arise for apples this season, but every effort should be made to conserve and preserve in every way possible the food supplies of the country. To this end the home bottling of fruits and vegetables, as described in Leaflet No. 17, should be practised to a greater extent than heretofore, as should the making of jam from the fruits which are not suitable for preservation by other means.

SEASONAL POULTRY-KEEPING NOTES.

Management of Birds selected for Breeding.—Hens selected for breeding should be moved to their new quarters now, if this has not already been done. The hens should be fed lightly now so that they have a good rest before commencing to produce hatching eggs. A grain food consisting of oats or a mixture of oats and wheat screenings given in two daily feeds would be sufficient food for these hens at present. The amount of grain given should be adjusted so that all the food has been eaten within a reasonable time. It is a very bad practice to allow food to lie in troughs between meal hours.

Where possible, the breeding hens should be allowed to roam over stubble ground and to pick up grain for themselves, thus utilising grain which would otherwise be wasted. If this is done less grain will be required to be given to them.

Where, however, hatching eggs are required in October, the hens should receive liberal feeding. A suitable mash for this purpose can be prepared by wetting the following meal mixture with separated milk:—

4 parts by weight pollards or sharps.
2 „ „ „ bran.
2 „ „ „ maize meal.
1 part „ „ ground oats.

If only limited supplies of separated milk are available for the poultry on the farm, it should be reserved for the breeding flock, as milk is a very good food not only for encouraging laying, but also for ensuring good hatchability of the eggs.

Further hints on the feeding and management of breeding hens are given in Leaflet No. 83.

Feeding and Management of Pullets.—Proper feeding, careful management and good housing accommodation are essential if the best returns are to be obtained from the laying flock. There are many proprietary foods on the market for laying hens, and while these may give quite satisfactory results, producers should consider whether it might not be more economical to prepare their own meal mixtures. Details of rations suitable for laying hens, which are designed to contain as large a proportion as possible of home-produced feedingstuffs, are given on page 298 of this report. Further particulars of suitable meal and grain mixtures for winter egg production are given in Leaflet No. 3.

Water Supply.—Laying hens require an ample supply of clean water if a high production level is to be maintained. The vessels containing water should be washed out and filled each morning. If necessary, more water should be provided during the day. Where dry mash is fed there should be water convenient to the dry mash hopper.

Provision of Shell-making Material.—It should be realised that hens require a constant supply of shell-making material. Not only are thin-shelled eggs a loss, but these may cause hens to acquire the habit of eating eggs, causing a still greater loss; also there is a risk of soft-shelled eggs breaking before being laid, and thereby leading, in many instances, to the death of the birds. Suitable shell-forming material can be given in the form of oyster shell or of limestone grit. The materials should be placed in easily accessible boxes, and the supply kept constantly replenished.

Preparations for Hatching.—With the approach of the hatching season all housing and equipment should be examined, and replacements and repairs carried out where necessary. The incubator house should be large, airy, and well-lighted, but dry, warm, and free from draughts. The floor of the incubator room should be firm and free from vibration. Where a concrete floor is to be used, a good foundation of stones should be laid underneath the concrete. The roof of the incubator house should be made of a good insulating material such as slate, asbestos, or wood and felt. If corrugated iron is used a ceiling of wood should be put on under the iron to keep in the heat during spells of cold weather and to prevent frost drip.

Incubators should be fully examined and tested to ensure that all parts are in good order. Particular attention should be paid to thermometers and capsules, as on the efficiency of these depend the maintenance of the proper temperature in the machine. The accuracy of the thermometer can be ascertained by testing it against a clinical thermometer in water about blood heat. On no account should the thermometer be put in boiling water. The capsule may be tested by holding it between the finger and thumb in a warm place. If the capsule is working properly it will expand when exposed to heat.

Disinfection of Incubators.—All incubators should be thoroughly washed and disinfected at the beginning of the hatching season, and again after each hatch. A suitable method of disinfection is to fumigate the incubator with potassium permanganate crystals and formalin. Two teaspoonfuls of potassium permanganate crystals should be placed in a tin saucer on the egg tray of the incubator, and two tablespoonfuls of formalin poured over the crystals. The doors of the incubator should then be closed tightly and not opened again for twenty-four hours. This treatment is most effective when the air is moist and warm, so the incubator should first be damped inside with hot water, the lamp lighted, and the temperature raised before fumigation takes place. Full particulars regarding the disinfection and fumigation of incubators and chicken-rearing appliances are given in Leaflet No. 59. Hints on the management of incubators are given in Leaflet No. 20.

Turkeys.—Turkeys will benefit from a range over stubbles, and will pick up a good deal of food if much grain has been shed. The quantity of food given should be reduced, if necessary, for some time, and then gradually increased.

ANNOUNCEMENTS AND REMINDERS.

IMPORTATION OF SHEEP INTO NORTHERN IRELAND FROM SCOTLAND

Owing to the war situation the Ministry of Agriculture for Northern Ireland announces that the list of approved Scottish sheep sales published on 28th. August has been cancelled, and only the sales enumerated below will now be recognised for the purchase of sheep by Northern Ireland breeders. Persons interested should communicate with the Ministry before going to the sales.

If there is sufficient demand an officer of the Ministry will be in attendance at the sales for the purpose of issuing permits for the importation into Northern Ireland of sheep purchased thereat.

These facilities are intended only for breeders who wish to retain the animals purchased at the sales for breeding purposes. All animals imported must be moved directly from the Northern Ireland port of landing to the farms to which they are licensed, where they are to be isolated and detained **for a period of not less than 14 days.**

It should be understood that these arrangements may be either modified or cancelled at any time.

1. **Lawrie & Symington, Lanark.**
   26th. and 27th. September ... Blackface Ewes, Leicester and Down Rams and Blackface Gimmers.
   12th. October ... ... Blackface Rams and Lamb Rams.
2. **J. Craig, Ltd., Ayr.**
   21st and 22nd September Blackface and Cheviot Hill Ewes and Lambs.
3. **Live-Stock Marts, Ltd., Stirling.**
   16th. October ... ... Unscored Blackface Ewes.

SEVENTEENTH EGG LAYING TEST AT STORMONT.

PROVISIONAL LIST OF AWARDS.

The following is the list of awards as at present known; awards offered by bodies other than the Ministry have not all been included in this list as full information is not yet available.

CHAMPIONSHIP CUP.

The Silver Cup offered by the Ministry in respect of the pen laying the greatest number of scoring eggs (i.e., eggs of 2 ounces and over in weight) during the period of the test, has been won by Mr. J. Waugh, Aldfreck, Ballycarry, Co. Antrim, with Pen No. 41 of White Leghorns, which laid 1,352 super grade and first grade eggs, and a total of 1,414 eggs.

MONEY AWARDS IN THE DIFFERENT SECTIONS:

SECTION 1. WHITE WYANDOTTES (Open).

Section Breed & Award	Pen No.	Name and Address of Owner.	No. of eggs laid by Pen.				
			Super Grade	1st Grade	2nd Grade	Under 2nd Grade	Score Value
First (£5)	11	Mr. J. Lenaghan, Tyconnet, Ballynahinch, Co. Down.	863	418	40	—	1,281
Second (£4)	16	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast.	716	481	45	—	1,197
Third (£3)	8	Mrs. D. C. Gamble, The Retreat, Coalisland, Co. Tyrone.	573	596	76	—	1,169
Fourth (£2)	12	Mr. J. Lenaghan, Tyconnet, Ballynahinch, Co. Down.	757	409	25	—	1,166
Fifth (£1)	19	Dr. J. Stuart, Killyflue, Ballymena, Co. Antrim.	405	757	138	1	1,162

SECTION 2. WHITE WYANDOTTES (Station-holders).

First (£3)	30	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Co. Fermanagh.	772	388	28	—	1,160
Second (£2)	29	Miss A. Peel, Aghadalgon, Roses Lane Ends, Belfast.	651	449	94	3	1,100
Third (£1)	22	Mrs. M. Rodgers, Ballyginney, Dundrum, Co. Down.	615	437	346	11	1,052

SECTION 3. WHITE LEGHORNS (Open).

First (£3)	41	Mr. J. Waugh, Aldfreck, Ballycarry, Co. Antrim.	774	578	62	—	1,352
Second (£2)	39	Mr. J. Telford, Drumarkin, Rathfriland, Co. Down.	857	354	44	1	1,211
Third (£1)	34	Mrs. H. M. Fletcher, Ashgrove, Lisadian, Hillsboro', Co. Down.	467	561	60	—	1,028

SECTION 4. WHITE LEGHORNS (Station-holders).

First (£3)	52	Mrs. J. Short, Tullyvally, Seskinore, Omagh, Co. Tyrone.	619	609	134	2	1,228
Second (£2)	47	Miss I. Gilmer, Rashee, Ballyclare, Co. Antrim.	376	799	127	1	1,175
Third (£1)	48	Mr. P. King, Leitrim P.O., Banbridge, Co. Down.	558	490	97	—	1,048

SECTION 5. RHODE ISLAND REDS (Open).

Section Breed & Award	Pen No.	Name and Address of Owner.	No. of eggs laid by Pen.				
			Super Grade	1st Grade	2nd Grade	Under 2nd Grade	Score Value
First (£6)	66	The Marquis of Hamilton, Baronscourt, Co. Tyrone.	595	632	52	1	1,227
Second (£5)	67	Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh.	326	860	138	2	1,186
Third (£4)	61	Mrs. E. R. Dunwoody, Benmore, Islandmagee, Co. Antrim.	312	846	111	2	1,158
Fourth (£3)	72	Mrs. J. M'Neill, Drain's Bay, Larne, Co. Antrim.	760	392	19	3	1,152
Fifth (£2)	68	Miss E. E. Kennedy, Tullyreagh, Glarryford, Co. Antrim.	348	791	45	—	1,139
Sixth (£1)	74	Mr. R. J. O'Hanlon, Mullahead, Tanderagee, Co. Armagh.	587	494	332	4	1,081

SECTION 6. RHODE ISLAND REDS (Station-holders).

First (£3)	89	Miss S. M'Kee, Ardmillen House, Killinchy, Co. Down.	445	793	126	1	1,238
Second (£2)	86	Miss E. M'Clelland, Ballynashee, Ballyclare, Co. Antrim.	310	902	51	—	1,212
Third (£1)	83	Mrs. H. H. Dickson, Lower Coagh, Co. Tyrone.	538	673	86	—	1,211

SECTION 7. ANY OTHER PURE BREED.

First (£6)	113	Mr. R. Holmes, Killykergan, Coleraine, Co. Derry. (Black Leghorn).	492	606	181	4	1,098
Second (£5)	106	Mr. R. Holmes, Killykergan, Coleraine, Co. Derry. (Buff Rock).	368	725	228	4	1,093
Third (£4)	93	Mrs. M. Benson, Killymoon, Cookstown, Co. Tyrone. (Light Sussex).	727	337	139	—	1,064
Fourth (£3)	107	Mr. R. Holmes, Killykergan, Coleraine, Co. Derry. (Buff Rock).	475	571	265	5	1,046
Fifth (£2)	112	Mrs. K. Bamforth, Melmount, Strabane, Co. Tyrone. (Brown Leghorn).	217	714	194	1	931
Sixth (£1)	96	Greenmount Agr. & Hort. College, Muckamore, Co. Antrim. (Light Sussex).	245	670	108	14	915

SECTION 8. POULTRY CLUBS AND YOUNG FARMERS' CLUBS.

Section Breed & Award	Pen No.	Name and Address of Owner.	No. of eggs laid by Pen.				
			Super Grade	1st Grade	2nd Grade	Under 2nd Grade	Score Value
First (£3)	126	Portadown Poultry Club, Co. Armagh. (Rhode Island Red).	198	1,008	142	1	1,206
Second (£2)	120	Ballywalter Young Farmers' Club, Co. Down. (Rhode Island Red).	368	729	86	—	1,097
Third (£1)	127	Ballywalter Young Farmers' Club, Co. Down. (White Wyandotte).	482	561	69	3	1,043

WINTER PRODUCTION AWARD.

The award of £2 offered in respect of the pen laying the greatest number of scoring eggs during the first 16 weeks of the test, and otherwise fulfilling the Rules of the test, has been won by The Marquis of Hamilton, Baronscourt, Co. Tyrone. Pen No. 66—Rhode Island Reds. 447 scoring eggs.

SCIENTIFIC POULTRY BREEDERS' ASSOCIATION'S CUP.

The Challenge Cup offered by the Council of this Association in respect of the pen laying the greatest number of scoring eggs during the winter period, i.e., first 16 weeks of test, has also been won by The Marquis of Hamilton with the same pen of birds.

SOUTH TYRONE POULTRY-KEEPERS' ASSOCIATION'S CUP.

The Silver Cup provided by the South Tyrone Poultry-keepers' Association for the pen of best type amongst those eligible for awards for egg production entered by a poultry-keeper from Co. Tyrone has been won by Mrs. J. Short, Tullyvally, Seskinore, Omagh, Co. Tyrone. Pen No. 52, White Leghorns. 1,228 scoring eggs.

RHODE ISLAND RED CLUB CUP.

This Cup, which is presented by the Rhode Island Red Club for competition amongst members of the Club who have pens at the test, and is awarded in respect of the pen amongst those eligible for first class certificates which most nearly conforms to the Club's standards for birds of the breed, has, together with the cash award of £5 provided by the President of the Club for the winner of the Cup, been won by Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh, with pen No. 67.

The cash award of £2 10s. 0d., provided by the President of the Rhode Island Red Club for the member whose pen is placed Reserve for the Cup, has been won by Mr. T. J. McMillan, Crossgar, Co. Down, with pen No. 71.

MINISTRY'S AWARDS FOR TYPE.

The four special awards of £2 each for pens of the best type of (1) White Wyandottes, (2) White Leghorns, (3) Rhode Island Reds, and (4) Light Sussex amongst those which were eligible for awards for egg production, have been won by the following :—

White Wyandottes—Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast. (Pen No. 16.)
White Leghorns—Mr. J. Telford, Drumarkin, Rathfriland, Co. Down. (Pen No. 39.)
Rhode Island Reds—Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh. (Pen No. 67.)
Light Sussex—Greenmount Agricultural and Horticultural College, Muckamore, Co. Antrim. (Pen No. 96.)

MEDALS FOR INDIVIDUAL BIRDS.

Award	Qualification	Pullet No.	Pen No.	Owner and Breed	Eggs laid. Super Grade	1st Grade	2nd Grade	Score Value
Silver Medal	Best Pullet in test	511	86	Miss E. M'Clelland, Ballynashee, Ballyclare, Co. Antrim. (Rhode Island Red)	102	169	5	271
Bronze Medal	Best Pullet in Section 1	67	12	Mr. J. Lenaghan, Tyconnet, Ballynahinch, Co. Down. (White Wyandotte)	170	91	3	261
Bronze Medal	Best Pullet in Section 2	175	30	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Co. Fermanagh. (White Wyandotte)	195	63	3	258
Bronze Medal	Best Pullet in Section 3	245	41	Mr. J. Waugh, Aldfreck, Ballycarry, Co. Antrim. (White Leghorn)	138	111	21	249
Bronze Medal	Best Pullet in Section 4	286	48	Mr. P. King, Leitrim, Banbridge, Co. Down. (White Leghorn)	18	213	6	231
Bronze Medal	Best Pullet in Section 5	392	66	The Marquis of Hamilton, Baronscourt, Co. Tyrone. (Rhode Island Red)	140	121	1	261
Bronze Medal	Best Pullet in Section 7	576	96	Greenmount Agr. & Hort. College, Muckamore, Co. Antrim. (Light Sussex)	54	193	8	247
Bronze Medal	Best Pullet in Section 8	715	120	Ballywalter Young Farmers' Club. Owner—Miss M. J. Garrett, Ballybuttle, Millisle. (Rhode Island Red)	67	201	4	268

The Champion pullet which won the Silver Medal was in Section 6—Station-holders, Rhode Island Reds.

AGRICULTURAL INDEX NUMBERS.

Monthly Index Numbers of Prices of Individual Commodities.

(Corrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1939				1938	1937
	August	July	June	May	August	August
Cattle : Fat ...	80†	82	82	81	81	93
Store ...	89	90	87	86	86	92
Cows : Fat ...	67	68	65	73	62	78
Sheep & Lambs: Fat	50	49	50	55	52	75
Bacon Pigs ...	*	81†	80	75	86	85
Hens & Chickens ...	68	66	74	74	64	76
Ducks	92	89	88	99	93	101
Eggs	101	97	112	98	101	93
Milk :						
For Manufacture	*	88	88	85	85	82
Whole ...	117	125	121	115	117	109
All	*	97	96	95	93	90
Farmers' Butter ...	80	81	79	80	88	78
Wool	73	70	66	—	55	117
Potatoes ...	71	78	67	91	76	78
Oats ...	61	61	61	63	86	102
Hay	91	83	83	80	83	97
Oat Straw ...	84	81	94	85	88	103
Grass Seed: Perennial	113	—	—	—	108	59
Italian	96	—	—	—	—	—
Mixed	133	—	—	—	—	—
All ...	113	—	—	—	102	56

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, the Wheat Act, and Government Payments for Milk.

Cattle : Fat ...	93†	94	94	93	93	105
Milk :						
For Manufacture	*	108	107	100	105	95
All	*	112	110	105	108	99

* Not yet available. † Provisional.

Monthly Index Numbers of Prices of Individual Commodities.

(Uncorrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1939				1938	1937
	August	July	June	May	August	August
Cattle : Fat ...	80†	85	87	87	80	92
Store ...	91	93	91	88	88	94
Cows : Fat ...	64	66	67	76	59	74
Sheep & Lambs: Fat	45	48	53	63	46	68
Bacon Pigs ...	*	78†	80	81	85	83
Hens & Chickens ...	61	64	73	77	58	68
Ducks	91	89	87	98	92	101
Eggs	103	83	80	61	103	92
Milk :						
For Manufacture	*	74	73	75	76	74
Whole ...	104	104	104	104	104	96
All	*	82	81	84	83	80
Farmers' Butter ...	74	74	75	80	81	70
Wool	70	67	64	—	53	112
Potatoes ...	82	68	72	96	89	92
Oats	69	67	66	67	97	115
Hay	90	90	88	81	81	95
Oat Straw ...	84	80	88	83	86	101
Grass Seed: Perennial	93	—	—	—	88	49
Italian	88	—	—	—	—	—
Mixed	109	—	—	—	—	—
All ...	96	—	—	—	85	47

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, the Wheat Act, and Government Payments for Milk.

Cattle : Fat ...	93	98	100	99	92	103
Milk :						
For Manufacture	*	92	89	88	94	85
All	*	95	93	93	94	88

* Not yet available. † Provisional.

PRICES USED IN THE CALCULATION OF THE INDEX NUMBERS.

Commodity	1927–29	1939				1938	1937
		August	July	June	May	August	August
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cattle : Fat, per live cwt. ...	45 2	36 2	38 3	39 5	39 2	36 0	41 5
Store, per head	223 7	202 11	208 2	203 0	196 10	197 0	210 0
Cows : Fat, per head	336 10	215 5	223 6	225 10	254 7	197 11	250 7
Sheep & Lambs : Fat, per head	53 6	24 2	25 5	28 3	33 7	24 10	36 2
Bacon Pigs, per dead cwt. ...	78 8	*	61 7†	62 10	63 4	66 9	65 1
Hens & Chickens per head ...	3 0½	1 10½	1 11¼	2 2¾	2 4¼	1 9	2 1
Ducks, per head	2 6½	2 3¾	2 3¼	2 2½	2 5¾	2 4¼	2 6¾
Eggs, per 120 ...	13 6	13 11	11 2	10 9	8 2	13 10	12 5
Milk : For Manufacture, per gal.	0 6¼	*	0 4⅜	0 4½	0 4⅜	0 4⅜	0 4⅜
Whole, per gal.	1 0	1 0½	1 0½	1 0½	1 0½	1 0½	0 11½
Farmers' Butter, per lb. ...	1 5½	1 1	1 1	1 1	1 2	1 2¼	1 0½
Wool, per lb. ...	0 11	0 7¾	0 7¼	0 7	—	0 5¾	1 0¼
Potatoes, per cwt.	3 5	2 9	2 4	2 5	3 3	3 0	3 1
Oats, per cwt.	8 1	5 7	5 5	5 4	5 5	7 10	9 4
Hay, per ton ...	73 8	66 3	66 0	64 10	59 7	59 6	69 9
Oat Straw, per ton ...	47 6	39 9	37 9	41 11	39 8	40 10	47 11
Grass Seed : Perennial, per cwt. ...	16 9	15 8	—	—	—	14 9	8 2
Italian, per cwt.	22 7	20 0	—	—	—	—	—
Mixed, per cwt.	15 11	17 5	—	—	—	—	—

* Not yet available. † Provisional.

MINISTRY OF LABOUR RETAIL PRICES AND INDICES.

The Ministry of Labour general index of retail prices of food in Great Britain and Northern Ireland at August 1st was 37 per cent. above the level of July, 1914, as compared with 39 per cent. at July 1st and 41 per cent. at August 2nd, 1938. The fall of two points in the current index was mainly due to seasonal decreases in the prices of potatoes, while flour and bread also averaged less than a month earlier. On the other hand, slight increases were recorded in prices of butter, milk and bacon.

The following table shows the average retail prices of certain foods in large towns and villages on August 1st, 1939, July 1st, 1939, and August 2nd, 1938, with the corresponding increases over July, 1914.

Article.	Aug. 1st, 1939	July 1st, 1939	Aug. 2nd, 1938	Increase over July, 1914.		
				Aug. 1st, 1939	July 1st, 1939	Aug. 2nd, 1938
	per lb. s. d.	per lb. s. d.	per lb. s. d.	per cent.	per cent.	per cent.
Beef, British—						
Ribs	1 2¼	1 2¼	1 2½	43	43	46
Thin Flank	0 7½	0 7½	0 7¾	15	15	17
Beef, Chilled or Frozen—						
Ribs	0 9½	0 9½	0 9½	31	30	32
Thin Flank	0 4¾	0 4¾	0 5	1	Nil	3
Mutton, British—						
Legs	1 3½	1 3½	1 3¾	48	48	49
Breast	0 7½	0 7½	0 7¾	14	15	18
Mutton, Frozen—						
Legs	0 10¼	0 10¼	0 10¼	50	48	52
Breast	0 4	0 4	0 4	— 4*	— 4*	Nil
Bacon (Streaky) ...	1 3	1 2¾	1 3¾	33	31	41
Butter—						
Fresh	1 4¼	1 4	1 4¾	12	10	15
Salt	1 3¼	1 3	1 3½	7	5	9
Cheese	0 10	0 10	0 10¾	15	14	24
	Per Qt.	Per Qt.	Per Qt.			
Milk	0 6¾	0 6½	0 6¾	91	88	94
	each	each	each			
Eggs (Fresh)	0 1¾	0 1¾	0 1¾	36	33	49
	per 4 lb.	per 4 lb.	per 4 lb.			
Bread	0 8½	0 8½	0 9	43	46	56
	per 7 lb.	per 7 lb.	per 7 lb.			
Flour	1 1½	1 1¾	1 3¼	27	30	43
Potatoes	0 7¼	0 9¾	0 7½	51	100	53

* Decrease.

The cost of maintaining unchanged the pre-War standard of living of working-class families at August 1st was approximately 55 per cent. over the level of July, 1914, or 1 point lower than the figures recorded at July 1st, 1939, and a year ago.

PRICES OF FEEDING STUFFS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per cwt. of Feeding Stuffs at 1st September, 1939, in ten representative centres in Northern Ireland.

	Antrim	Armagh	Ballymena	Belfast	Coleraine	Dungannon	Enniskillen	Newry	Omagh	Strabane
Protein Foods :	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed (whole)	18 0	16 0	16 0	16 0	20 0	—	16 3	—	18 6	—
Linseed Cake, home-made ...	11 0	12 6	11 6	11 0	13 0	13 0	11 6	—	12 0	—
Linseed Cake, foreign	—	11 6	11 0	10 6	12 0	11 6	10 6	—	11 0	10 3
Linseed Cake Meal	11 0	12 6	11 6	10 6	12 0	12 3	11 9	11 6	11 0	11 0
Cotton Cake, decorticated ...	—	—	9 6	10 6	9 6	9 6	10 6	—	10 0	9 6
Earthnut Cake, decorticated ...	—	—	8 6	8 6	9 3	9 0	8 9	—	9 6	—
Soya Bean Meal (extracted) ...	10 3	11 0	10 6	10 6	11 6	—	11 6	—	11 0	10 0
Fish Meal (60% protein) ...	17 3	18 0	17 0	17 0	17 0	18 0	17 3	16 6	16 6	16 6
Meat Meal (60% protein) ...	16 6	15 0	13 6	13 6	16 6	15 6	—	—	15 0	16 0
Meat and Bone Meal (40% protein)	—	10 0	9 0	9 6	10 0	9 6	11 0	—	—	10 0
Medium Protein Foods :										
Palm Kernel Cake	—	—	10 0	7 6	—	—	—	—	9 6	—
Palm Kernel Meal	—	9 6	10 0	7 6	—	—	—	—	9 6	—
Starchy Foods :										
Maize (whole)	7 0	—	6 9	6 9	7 6	7 9	7 0	—	—	6 3
Maize Meal	7 3	7 0	6 9	7 0	7 6	8 0	7 3	6 3	7 0	6 9
Maize Flaked	7 9	7 6	7 3	7 6	8 0	9 0	8 0	7 0	8 0	7 9
Wheat (whole)	6 9	6 0	6 6	6 0	6 3	—	6 3	6 6	—	6 3
Bran, Red	7 3	7 0	7 0	7 0	7 9	7 6	8 0	6 9	8 0	6 9
Bran, White	8 0	8 0	8 6	8 3	8 9	9 0	9 0	8 0	9 6	9 0
Pollard, Brown	7 3	7 0	7 6	7 0	7 0	7 6	7 9	6 9	8 0	7 0
Pollard, White	8 0	8 0	8 6	8 0	7 6	8 9	8 3	7 3	9 0	8 3
Barley Meal	7 6	7 6	7 6	7 6	7 3	7 6	8 3	6 6	7 6	7 3
Tapioca Root Flour	—	—	—	7 6	—	—	7 6	—	—	—
Oats (whole)	7 9	7 0	6 6	7 0	6 6	7 6	7 6	6 0	5 0	5 3
Crushed Oats	8 0	7 6	7 0	7 6	7 0	8 0	8 4	6 6	6 0	6 3

Non-Concentrates :—The average prices at representative markets at the beginning of September, 1939, were as follows :—Potatoes (New crop), 3/9 per cwt.; Upland Hay, 71/2 per ton; Meadow Hay, 55/5 per ton; Oat Straw, 36/3 per ton.

AVERAGE PRICES OF FEEDING STUFFS.

The following table shows the average retail cash prices per cwt. of feeding stuffs at 1st September, 1939, with comparative prices as at the first of the previous month; the costs per unit of protein equivalent and of starch equivalent are also given in respect of each month.

	Protein Equivalent	Starch Equivalent	Average price per cwt. at 1st Sept., 1939	Average price per cwt. at 1st Aug., 1939	Cost per unit of protein equivalent: Sept.	Cost per unit of protein equivalent: Aug.	Cost per unit of starch equivalent: Sept.	Cost per unit of starch equivalent: Aug.
Protein Foods			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed ...	18.75	119.2	17 3	16 5	18 5	17 6	2 11	2 9
Crushed Linseed	18.75	119.2	18 0	17 8	19 2	18 10	3 0	3 0
Linseed cake (home-made)	24.6	74.0	11 11	11 8	9 8	9 6	3 3	3 2
Linseed cake (foreign)	27.05	74.5	11 0	10 9	8 2	7 11	2 11	2 11
Linseed cake meal	24.6	74.0	11 6	11 2	9 4	9 1	3 1	3 0
Decorticated Cotton cake ...	34.65	68.4	9 10	9 7	5 8	5 6	2 11	2 10
Decorticated Earthnut cake	41.3	73.0	8 11	8 11	4 4	4 4	2 5	2 5
Extracted Soya bean meal ...	38.3	64.0	10 9	10 8	5 7	5 7	3 4	3 4
Fish meal (60% protein)	53.0	58.9	17 1	16 8	6 5	6 3	5 10	5 8
Meat meal (60% protein)	55.0	61.0	15 2	15 2	5 6	5 6	5 0	5 0
Meat & Bone meal (40% protein)	36.0	44.0	9 10	9 9	5 6	5 5	4 6	4 5
Medium Protein Foods								
Palm kernel cake	16.95	73.2	9 0	8 5	10 7	9 11	2 6	2 3
Palm kernel meal	16.55	71.3	9 2	8 5	11 1	10 2	2 7	2 4
Starchy Foods								
Maize ...	7.65	77.6	7 0	6 3	18 4	16 4	1 10	1 7
Maize meal ...	7.65	77.6	7 1	6 6	18 6	17 0	1 10	1 8
Flaked maize ...	9.2	84.0	7 9	7 2	16 10	15 7	1 10	1 8
Wheat ...	9.6	71.6	6 4	6 1	13 2	12 8	1 9	1 8
Red Bran ...	10.0	42.6	7 4	7 1	14 8	14 2	3 5	3 4
White Bran ...	10.0	42.6	8 7	8 6	17 2	17 0	4 0	4 0
Brown pollard	10.85	56.5	7 3	7 0	13 4	12 11	2 7	2 6
White pollard ...	10.85	56.5	8 2	7 11	15 1	14 7	2 11	2 10
Barley meal ...	7.3	71.4	7 5	7 1	20 4	19 5	2 1	2 0
Oats	7.6	59.5	6 7	6 5	17 4	16 11	2 3	2 2
Crushed oats ...	7.6	59.5	7 3	7 1	19 1	18 8	2 5	2 5
Tapioca root flour	1.2	83.5	7 6	6 8	125 0	111 1	1 10	1 7
Non-Concentrates								
Potatoes ...	0.85	18.5	3 9	3 8½	88 3	87 3	4 0½	4 0
Upland Hay ...	4.9	29.0	3 6¾	3 6	14 6½	14 3½	2 5½	2 5
Meadow Hay ...	4.7	37.0	2 9¼	2 10¼	11 9½	12 1¾	1 6	1 6½
Oat Straw ...	0.5	21.0	1 9¾	2 0¼	72 6	80 10	1 8¾	1 11

The object of the foregoing tables, besides providing information regarding the prices of feeding stuffs and the trend of prices, is to give purchasers a

guide as to the economic purchase of supplies. It should be understood that the price per ton is not a sound basis on which to judge whether or not a particular food or grade of a particular food is good value for money. The composition of the foods is the only basis on which different grades can be compared. The value of foods of different kinds, but of the same nature in reference to market prices, can also be compared on this basis.

In the case of an artificial manure which supplies only one fertilising ingredient as, for example, sulphate of ammonia, which supplies nitrogen, the cost of the unit of nitrogen at the price charged can be determined quite readily by dividing the price per ton by the percentage of nitrogen in the sample, and the figure thus obtained is the cost of a unit of nitrogen. By this method the most economical source of nitrogen can be ascertained. Similarly, in the cases of phosphatic and potassic manures.

With feeding stuffs, however, the same method cannot be applied to determine comparative values. This is because every feeding stuff contains three important food constituents in varying proportions. These are (1) carbohydrates, (2) oils or fats, and (3) proteins or albuminoids. The carbohydrates comprise a group of substances such as starch, sugar and cellulose. These substances supply heat or energy to the animal, and the surplus goes to form fat. They are the fuel which the animal requires to keep the body "fires" burning. The oils of a feeding stuff are also heat and energy suppliers, and the surplus is stored as fat. The oils are approximately 2½ times more valuable than the carbohydrates as heat and energy producers, but excess in a ration may lower its digestibility and cause digestive troubles. The proteins are the most valuable and most expensive food constituent. They contain nitrogen and are the part of the food from which products which contain protein are chiefly made. Thus the protein products, such as lean meat, milk and eggs, are formed principally from protein, and young, growing animals, dairy cows and laying hens must have an adequate quantity of protein for full growth, development and production.

While all animals require a certain amount of carbohydrates, oils and proteins, the relative amounts depend on the class of stock. For example, a two-year-old fattening bullock requires much less protein than a dairy cow in milk and a fattening chicken less than a laying pullet.

There are wide differences in the composition of the different kinds of feeding stuffs. Some are rich in carbohydrates and, therefore, particularly valuable for fattening purposes. These include oats, maize, barley and wheat, and their products. Others are rich in protein and are valuable for producing flesh, milk and eggs. These include decorticated cotton cake, decorticated earthnut cake, meat meal and soya bean meal.

In the following table the composition of some of the commonly used feeding stuffs is shown—

	Water.	Protein.	Oil.	Carbohydrates.
Non-Concentrates				
Swede turnips ...	88	1	0.2	9
Potatoes	75	2	0.1	21
Cabbage	89	1.5	0.5	8
Oat Straw	14	4	2	37
Meadow hay ...	10	10	3	45
Pasture grass ...	80	3.5	0.8	10
Fattening Foods				
Crushed oats ...	13	9	6	60
Maize meal ...	12	10	4	70
Barley meal ...	13	12	2	66
Pollard	13	15	5	57
Flesh forming foods				
Decorticated Cotton cake	9	40	9	26
Decorticated Earthnut cake	10	46	7	23
Meat meal	11	60	6	—
Soya bean meal ...	11	44	1.5	32

The problem confronting the purchaser of feeding stuffs, who is concerned with the business of getting best value for money, is one which is much more difficult to solve than is the case with artificial fertilisers. There are at least four aspects of the problem to be considered:

(1) The quality of the different foods offered for sale. This can be determined by reference to the particulars of composition which a seller must give a purchaser in accordance with the Fertilisers and Feeding Stuffs Act.

(2) The physical condition of the foods, and if fresh or stale.

(3) The suitability of the foods for the purpose in view.

(4) The comparative values of the foods at the prices quoted.

The chief concern of this section of the Report is comparative values and, therefore, that aspect of the problem will be considered specifically.

The proteins play a part in the nutrition of the animal which cannot be taken by either carbohydrates or oils. In addition to this, the proteins, carbohydrates and oils have very different values for the production of energy or fat. It therefore follows that the simple procedure of totalling the percentages of these three ingredients and dividing this total into the price per ton in order to obtain a value for a unit of the food-stuff is quite unsound. Various methods have been used to compare the values of different feeding stuffs, but none is completely satisfactory. For practical purposes the least cumbersome is the

method whereby the food-stuffs are placed in groups of similar composition, and the values of the members of each group are then compared by consideration of (a) their protein equivalents, and (b) their starch equivalents. The starch equivalent is the number of pounds of starch which would be required to produce the same amount of "fat" in an animal as 100 pounds of the food-stuff in question. It is essentially a measure of the fat-producing value of the food-stuff. The protein equivalent is the number of pounds of digestible true protein, plus half the number of pounds of non-protein nitrogenous substances such as amides, present in 100 pounds of the foodstuff. It is a measure of the value of the food-stuff to the animal as a source of protein.

By this method all foods can be reduced to comparable standards based on (1) the protein equivalent, and (2) the starch equivalent.

The next stage in comparing values is to determine the cost of a unit of protein equivalent and of starch equivalent in the different foods which are being compared, and to enable the reader to do this the protein and starch equivalent figures for the different foods are given in the table on page 327, and also the cost per unit of protein equivalent and of starch equivalent in each case. These costs have been determined by dividing the protein equivalent figure and the starch equivalent figure, respectively, into the current price per ton, and the lower the quotient figures thus obtained the cheaper is the particular food as a source of protein or of starch equivalent as the case may be.

However, it would be quite misleading to compare the cost of a unit of protein equivalent in a protein food (which is purchased principally for its protein) with the cost of a similar unit in a starchy food. In other words, foods such as maize meal and pollard cannot be compared on the basis of cost of protein equivalent with foods such as decorticated cotton cake and meat meal.

The best course to adopt is to consider for what purpose the particular food is required, decide what foods are suitable for that purpose, examine the samples of these different foods which are offered and, if all appear to be satisfactory, apply the unit value system of determining which one provides protein equivalent or starch equivalent at the cheapest rate. A few examples may be helpful in explaining the procedure.

(1) Suppose it is intended to purchase a protein food for the purpose of balancing a ration for dairy cows. The protein foods suitable for dairy cows are decorticated cotton cake, decorticated earthnut cake and soya bean meal. From the table on page 327 it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows :—

Decorticated cotton cake	...	...	5/8d.
Decorticated earthnut cake	...	...	4/4d.
Soya bean meal	...	...	5/7d.

Accordingly decorticated earthnut cake is the cheapest source of protein.

(2) A protein food is required as a milk substitute to balance the ration for fattening pigs. The foods suitable for this purpose are soya bean meal, meat meal and meat and bone meal. Referring again to the table, it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Soya bean meal	...	...	5/7d.
Meat meal (60% protein)	...	...	5/6d.
Meat and bone meal (40% protein)		...	5/6d.

This shows that at the respective prices per ton ruling at present, all three supply protein at about the same cost. It should be noted, however, that in the case of meat meal and meat and bone meal, the former should be used in preference to the latter, since 1 cwt. of it in the meal mixture will provide as much protein as $1\frac{1}{2}$ cwt. of the latter. Besides, having usually a lower content of oil than the 40% protein grade, the 60% meat meal is likely to prove more satisfactory than the lower grade, both from the thriving point of view and as regards producing bacon of good quality. The use of the lower grade of meat and bone meal in mixtures for the feeding of pigs is not recommended.

(3) Whether is it more economical to feed white pollard than brown pollard or white bran than red bran, even though the prices per ton of the white grades are higher than those of the brown or red grades? The figures in the table show that the cost of both the unit of protein equivalent and of starch equivalent is less for the brown pollard than the white, and less for the red than the white bran. It follows, therefore, that at current prices the coloured grades of pollard and bran are cheaper than the white grades. It should be remembered in this connection, however, that the comparison of costs in these cases has been made on the assumption that the composition of the coloured grades is the same as that of the white grades. A pollard containing say, 8 per cent. fibre, even if of a white colour, would have a far lower feeding value than one containing only 4 per cent. of fibre. Colour is not a guide as to the feeding value of pollard or bran.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

Beef supplies at the Belfast Auction Marts last month were, in the aggregate, somewhat similar in dimension to those of July. The flow of supplies was very steady, and equal to the demand. A considerable drop in price was recorded at the first sale of the month, and although a certain recovery set in, prices continued well below the levels of a month earlier. The average price per live cwt. for the month was 35/10d., as compared with 38/1d. for July, 1939, and 34/11d. for August, 1938.

The following table shows the average prices for fat cattle during last month compared with those ruling at the corresponding dates a year ago :—

Week ended	*per cwt.*	*Week ended*	*per cwt.*
5th August, 1939	... 35/8	6th August, 1938	... 35/–
12th ,, ,,	... 36/3	13th ,, ,,	... 35/3
19th ,, ,,	... 36/1	20th ,, ,,	... 35/6
26th ,, ,,	... 35/4	27th ,, ,,	... 34/4
2nd September, 1939	... 35/9	3rd September, 1938	... 34/9
Average for month	... 35/10	Average for month	... 34/11
9th September, 1939	... 40/3	10th September, 1938	... 33/11

Store cattle at the Auction Marts last month were in much heavier supply than a month earlier. Demand was better all month than in July, and prices improved. Good cattle became scarce towards the end of the month, and graziers had almost exhausted the supply of large forward sorts. Prices for the month were higher than in July, and almost 10/- per head in excess of those ruling in August, 1938. On the last sale day of the month price ranges were: large stores, £14 to £15 10/-; six-quarter-olds, £12 to £14; smaller sorts, £10 to £12 generally, with calves at from £7 10/- to £10 per head.

Dairy cattle were also in heavier supply at the marts last month. The improvement in trade noted in July continued throughout the month of August, and price levels generally remained unchanged.

Fat cows and bulls were slightly heavier offerings than a month earlier. Values showed a recovery on the month, but still remained below those of June.

Fat sheep and lambs continued to be offered in heavier numbers during August. A good demand prevailed, especially for those animals for which shippers competed with home buyers catering for the seaside trade. Good clearances were made at about the same prices as those ruling in July.

Weekly price ranges for fat cows, store cattle, dairy cattle and fat sheep and lambs appear on page 333 of this report.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description		Week ended 5–8–39	Week ended 12–8–39	Week ended 19–8–39	Week ended 26–8–39	Week ended 2–9–39
Fat Cows	Range of 1st quality	£13 to £17	£13 to £17-10	£13 to £18	£12 to £16-10	£11 to £16
	,, 2nd ,,	£9 to £13	£9 to £14	£10 to £13	£7 to £13	£8 to £13
Store Cattle :						
Forward Stores ...	Range of 1st quality	£14-10 to £15-17-6	£14-10 to £15-15	£13-15 to £15	£13 to £14-17-6	£13 to £15
	,, 2nd ,,	£12-10 to £14-5	£13 to £14-5	£12-10 to £13-10	£10 to £12-15	£12 to £12-15
Calves	,, 1st ,,	£10 to £12	£10-10 to £12-10	£10-10 to £12-10	£9-10 to £11-10	£9 to £11-10
	,, 2nd ,,	£7-10 to £9-10	£7-10 to £9-10	£7 to £9	£6-10 to £8-10	£7 to £8-10
Dairy Cattle :						
Milch Cows	Range of 1st quality	£20 to £25	£20 to £25-10	£20 to £24	£20 to £26	£20 to £26
	,, 2nd ,,	£16 to £19	£15 to £19	£16 to £19	£16 to £18	£16 to £19
Springers	,, 1st ,,	£20 to £24-5	£18 to £20	£18 to £20	£19 to £22-10	£17 to £19
	,, 2nd ,,	£16 to £19	£15 to £17-10	£15 to £17-10	£15 to £18	£15 to £16
Sheep and Lambs :						
Crossbred & White Ewes	Range of 1st quality	26/– to 37/–	30/– to 40/–	28/– to 42/6	27/– to 36/6	28/– to 37/6
	,, 2nd ,,	20/– to 31/–	25/– to 34/–	22/– to 31/–	23/– to 29/–	24/– to 31/–
Blackface Ewes ...	,, 1st ,,	21/6 to 30/–	23/– to 32/6	22/– to 32/6	20/– to 29/–	20/– to 30/–
	,, 2nd ,,	15/– to 25/–	17/– to 25/–	15/– to 24/–	15/– to 22/–	15/– to 24/6
Crossbred & White Lambs	,, 1st ,,	30/– to 41/–	28/– to 42/6	31/– to 38/6	29/– to 38/–	30/– to 40/–
	,, 2nd ,,	24/– to 27/6	22/– to 30/–	24/– to 32/–	24/– to 31/–	24/– to 32/–
Crossbred & White Hoggets	,, 1st ,,	28/– to 33/–	28/– to 32/6	——	——	——
	,, 2nd ,,	24/– to 27/6	23/– to 27/6	——	——	——
Rams	,, 1st ,,	28/– to 37/–	30/– to 40/–	30/– to 45/–	28/– to 37/–	32/– to 36/–
	,, 2nd ,,	23/– to 32/–	25/– to 34/–	25/– to 35/–	22/– to 33/–	25/– to 32/–

ACCOUNT OF TRADE AT FAIRS.

Store cattle at Northern Ireland fairs during the month of August, 1939, were forward in larger number than in July of this year, and also in excess of supplies in August, 1938. The decline in the prices of beef cattle continued to exercise an adverse effect on trade, and demand was rather slow generally. Only the best cattle met a ready sale, and while top quality usually maintained late rates, prices for other sorts were inclined to ease slightly.

The supply of fat cattle was also heavier than in the previous month and in the corresponding month a year earlier. Quality and condition were up to a fairly good standard, and demand on the whole was steady. Prices however suffered a seasonal decline of from 2/- to 3/- per live cwt. Well-finished cattle of medium-weight again constituted the chief attraction.

Dairy cattle were also increased in supply on the month almost to the level of a year ago. Demand continued good, and fairly good clearances were effected. Prices where altered were firmer. Good young cows and heifers met a ready sale at fully late rates.

Greatly increased numbers of sheep and lambs, most of which were fat stock, were on offer at fairs last month. A fairly good demand was experienced, and a large volume of business was transacted. Prices, although well up to previous levels this season, were rather lower than a year ago. Good, well-finished fat lambs, were in most demand, and good aged fats were also easy to sell. At the Lammas fair at Ballycastle supplies were larger than in 1938, and aggregated more than 5,000 head. The bulk of supplies consisted of store lambs. Buyers were well represented, and the demand was fair and prices on the whole slightly firmer than in 1938.

Young pigs were again in smaller number at fairs. A good demand prevailed up to near the close of the month, and prices appreciated by as much as 3/- and 4/- per head in some districts. In the last few days of the month, however, trade slackened and prices eased slightly.

Small numbers of brood sows were of inferior quality. Trade ruled slow, but prices were not materially affected. Good Yorks and York crosses remained in fairly good demand. The general price range was from £6 to £12 according to quality and condition.

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of August, 1939.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Lambs (under 12 months)	Young Pigs
					Cows	Heifers			
		Per head £ s.	Per cwt. Live weight	Per cwt. Live weight	Per head £ s.	Per head £ s.	Per head £ d.	Per head £ s.	Per head £ s.
1	Omagh ...	5 15	37/6 to 40/–	35/–	16 10	16 0	15 0	†1 5	——
1	Strabane ...	5 0	35/– to 37/6	35/–	15 10	——	——	——	——
2	Londonderry ...	——	35/– to 40/6	35/–	15 0	——	——	——	1 6
2	Rathfriland ...	6 8/6	34/– to 39/6	36/–	17 15	18 0	18 0	†1 3/6	1 7/6
								‡0 19/6	
3	Ballymoney ...	6 15/3	35/9 to 39/–	——	15 5	13 12/6	12 17/6	†1 6	1 10
4	Moy	——	32/6 to 39/–	34/–	14 15	14 6/3	14 5	†1 10	——
8	Dungiven ...	——	36/– to 40/–	36/6	14 10	13 0	——	†1 6	1 7
8	Irvinestown ...	6 17	35/– to 37/–	35/–	14 10	14 0	13 10	*1 12/6	1 15
								†1 10	
9	Crossgar ...	——	37/– to 40/–	——	18 10	——	17 0	——	1 14
9	Kilrea	5 5	33/– to 40/–	35/–	16 0	18 0	——	*1 10	1 12/6
								†1 7/6	
10	Enniskillen	6 5/9	33/– to 39/–	33/–	14 0	14 0	12 10	*1 8/6	1 14
11	Ballygawley ...	——	37/– to 41/–	33/–	13 10	——	13 10	——	1 15/6
16	Lisnaskea ...	6 2	31/– to 38/6	38/–	16 0	14 0	14 0	——	1 16
17	Ballynahinch ...	——	37/– to 40/–	38/–	16 0	14 0	14 0	——	1 17/6
19	Portadown ...	6 6/9	35/– to 37/–	33/–	18 0	16 0	17 0	——	1 17/6
21	Camlough ...	5 10	35/6 to 40/6	32/–	16 0	14 15	12 10	†1 4	——
21	Moneymore ...	6 10/9	36/– to 40/–	32/6	16 0	14 0	13 0	†1 4	1 11
22	Fintona ...	6 0	35/– to 37/6	32/6	15 10	14 10	14 10	†1 6	1 15
25	Castlederg ...	5 0	35/– to 36/6	32/6	15 0	——	——	†1 5	1 5
25	Killylea ...	——	28/6 to 40/6	34/–	15 15	——	15 10	——	——
26	Ballymena ...	6 15/6	32/– to 41/6	——	20 10	18 10	20 0	——	1 7
29	Ballycastle (Lammas)	4 10	38/–	36/–	14 0	14 5	——	†1 4/6	1 8/9
31	Antrim ...	——	34/– to 38/–	35/–	21 0	19 0	——	——	1 12

* Long Wools. † Downs and Crossbreds. ‡ Mountain.

COMPULSORY TILLAGE.

NOTICE TO FARMERS.

In 1940 each farmer in Northern Ireland must:—

(a) cultivate at least one-tenth of his total arable area in addition to what he cultivated in 1939;

(b) have at least one-fifth of his total arable area under cultivation in 1940.

"Total arable area" means all the land in the occupation of a farmer, wherever such land is situated, which is fit to be ploughed up and cropped.

It should be carefully noted that even if as much as two-fifths of the total arable area was cultivated in 1939 the occupier is required to put an additional one-tenth of the total arable area under cultivation in 1940. The limit beyond which he need not go is one-half of the total arable area, but every farmer is urged to put the maximum acreage under the plough so that the food supply of the nation may be ensured.

The following are examples for guidance:—

Total area of arable land occupied	Area cultivated in 1939	Additional area to be cultivated in 1940	Total area to be cultivated in 1940
Statute Acres	Statute Acres	Statute Acres	Statute Acres
100	Nil	20	20
100	5	15	20
100	10	10	20
100	15	10	25
100	40	10	50
100	45	5	50

This report will be sent free monthly, as issued, on application being made to the Secretary, Ministry of Agriculture, Stormont, Belfast.

MINISTRY OF AGRICULTURE.

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Scholarships in Creamery Management.
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Prospectus of Ulster Dairy School.
Prospectus of North West School.
Prospectus of Greenmount Agricultural and Horticultural College.

CATTLE.

Leaflet
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,, 5 The Dishorning of Calves.
,, 19 How to Feed Linseed.
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Guide to the Live Stock Breeding Act (Northern Ireland), 1922.

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Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated :—

(1)	The Annual Report of the Ministry of Agriculture for Northern Ireland	Price, 2/6 net.
(2)	Annual Report upon the Agricultural Statistics for Northern Ireland	Price, 2/- net.
(3)	The Journal of the Ministry of Agriculture for Northern Ireland	Price, 2/6 net.
(4)	The Agricultural Output of Northern Ireland, 1925.	Price, 2/6 net.

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